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April 16, 1997

Federal Communications Commission
Office of Secretary

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Re: Ex Parte Presentation in CC Docket No. 96-45
Federal-State Joint Board on Universal Service;
CC Docket Nos. 96-262, 94-1, 91-213 Access Charge
Reform

Dear Secretary Caton:

As a follow-up to the meeting on April 1, 1997, between representatives of Time Warner Communications Holdings, Inc. ("TWComm") and James Coltharp, Special Counsel to Commissioner James H. Quello, attached herewith is a study entitled *Defining the Universal Service Affordability Requirement: Community Income As a Factor in Universal Service Funding*.

As discussed at the meeting, this study analyzes median household income data for each Census Block Group (CBG), as obtained from the Census Bureau, and compares such data with the results from one of the cost proxy models submitted to the Commission to determine high-cost fund requirements. High-cost funding requirements were determined at three revenue benchmark levels (i.e., \$20, \$30, \$40). The revenue benchmark reflects an average revenue per line considering basic service rates and revenue from discretionary services, and represents a level, which if below the relevant costs, would determine the amount of high-cost funding for a given geographic area, such as a CBG.

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The results show that high-income/high-cost CBGs account for a significant portion of potential high-cost fund requirements. For example, at a \$20 revenue benchmark, CBGs above the 70th percentile of income in each state would account for approximately \$4.5 billion, or 30 percent, of high-cost fund requirements. At a \$30 revenue benchmark, CBGs above the 70th percentile would account for \$1.8 billion, or 25 percent, of the requirement.

TWComm is hopeful that this study will provide useful information for the Commission as it implements the universal service provisions of the 1996 Telecommunications Act. Please include the study along with this cover letter in the records of the above-referenced proceedings (Docket Nos. 96-45, 96-262, 94-1 and 91-213). As required by Section 1.1206 of the Commission's rules, enclosed are eight (8) copies of this cover letter and the study, two copies for each docket to which they relate. Please let me know if you have any questions.

Sincerely,



Thomas Jones

Enclosures

cc: James Coltharp

DEFINING THE UNIVERSAL SERVICE "AFFORDABILITY" REQUIREMENT

Community Income As a Factor In Universal Service Funding*

The extent to which basic local telephone service is "affordable" to an individual consumer is critically dependent upon that consumer's relative income and wealth.

The *Telecommunications Act of 1996* explicitly requires that "affordability" be included as a consideration in the development of a comprehensive universal service support mechanism: "Quality and rates — Quality services should be available at just, reasonable, and *affordable* rates."¹ Taking its cue from the legislation, the Federal-State Joint Board on Universal Service (Joint Board), in its November 8, 1996 *Recommended Decision* on Universal Service policy, expressly concluded that "[c]ustomer income level is a factor that should be examined when addressing affordability."²

The extent to which any given product or service is "affordable" obviously depends heavily upon the individual consumer's income and wealth. Thus, in developing a universal service support mechanism that conforms to the statutory requirement that basic local telephone service be "affordable," household income should somehow be included among the criteria under which the extent of universal service support is to be determined.

In fact, most states and the FCC currently apply income criteria in determining eligibility for income-targeted support programs such as "lifeline" and "Link-up America." For these programs, income (and other eligibility metrics) are determined on a customer-by-customer basis. These income-related funding schemes need not be affected by the creation of a formal universal service support mechanism, although the amount of such customer-specific support might change.

Both the FCC (in its March 8, 1996 NPRM) and the Joint Board (in its November 8, 1996 *Recommended Decision*) have advocated the use of so-called "cost proxy models" as a means for efficiently estimating the per-line incremental cost and the associated support requirement for a given geographical area.³ The various cost proxy models that have been offered examine costs at a highly granular level, in most cases with respect to geographic areas known as "Census Block Groups" (CBGs). A CBG is a demographic unit developed by the US Census Bureau that is described as

* This paper was prepared on behalf of Time Warner Communications, with the assistance of Dr. Lee L. Selwyn, Susan M. Baldwin, and Melissa N. Markley, respectively, President, Vice President, and Analyst of Economics and Technology, Inc., Boston, Massachusetts 02108.

1. 47 U.S.C. § 254(b)(1). Emphasis supplied.

2. *In the Matter of Federal-State Joint Board on Universal Service*, *Recommended Decision*, CC Docket No. 96-45, released November 8, 1996 (hereinafter "Recommended Decision"), at ¶ 129.

3. *Notice of Proposed Rulemaking and Order Establishing Joint Board*, CC Docket No. 96-45, released March 8, 1996 at ¶¶ 31-34; *Recommended Decision*, at ¶¶ 7, 184-185.

Defining the Universal Service "Affordability" Requirement

including "usually between 250 and 550 housing units, with the ideal size being 400 housing units."⁴ There are approximately 200,000 CBGs nationwide. The CBG is a basic unit of Census aggregation, and is generally designed to embrace an area containing a relatively homogeneous population (with respect to geography, demographics, etc.) Thus, the *median* household income for a given CBG is generally representative of the *individual* household incomes within that CBG.

While the various cost proxy models undertake to simulate the structure of the local telephone service plant, and in so doing to estimate the per-access line cost of local telephone service on a forward-looking basis, none of the models that have been submitted in this proceeding consider the *income* of the households that are being examined as to their eligibility for high cost support. Significantly, however, such CBG-specific income data is routinely collected and reported by the Census Bureau, and can provide an additional benchmark against which the support requirement can be evaluated. The purpose of this study is to provide such data and examine the impact that income considerations can have on universal service funding requirements.

Subsidization of basic local telephone service without regard to income levels will impose inefficient economic burdens across all segments of the US telecommunications industry.

Failure to consider and apply an income test is inconsistent with the statutory requirement regarding "affordability," and is inefficient as a matter of economic policy. Subsidizing consumers who can fully afford to pay the cost of their telephone service — and whose decision to take service is unaffected by the presence of such a subsidy — serves only to impose significant costs and economic burdens upon other segments of the economy while producing no offsetting economic or social benefit. Among other things, a funding obligation that is larger than that which is necessary to achieve the universal service goal will serve to increase the costs of and barriers to entry, suppress demand for price-elastic services, and diminish the prospects for effective competition overall. The magnitude of these costs may be considerable. As demonstrated below, approximately 20-30% of the aggregate universal service funding requirement for high-cost areas (depending upon the level of the revenue benchmark) could be eliminated if the support were limited to households with incomes below the 70th income percentile, for example. This could mean that up to \$4.5 billion in support burden might be avoided annually if such a policy were adopted.

Table 1 below provides examples of just a few of the numerous high-income areas that would receive subsidies *even at a \$40 per month support level*. Appendix A provides additional examples of high-income communities in each of the states that would receive high-cost support with no income-dependent affordability criterion incorporated into the design of a universal service support program.

That high-income areas also exhibit high-cost characteristics should not be unexpected. Wealthy suburban communities are frequently characterized by large multi-acre lots and hilly terrains. As relatively low density areas, the cost proxies for these CBGs are often well above the average.

4. 1990 Census of Population and Housing, Summary Population and Housing Characteristics, New York, at A-3 to A-5.

Defining the Universal Service "Affordability" Requirement

Table 1					
High-Cost Support Would Flow to Wealthy Communities Under Pending USF Proposals:					
Illustrative List of Areas Eligible for High-Cost Support					
Community	Median Household Income	BCM2 Proxy Cost/Line	Annual Subsidy		
			\$20 level	\$30 level	\$40 level
Bedford, New York	\$120,487	\$51.11	\$145,221	\$98,541	\$51,861
Boca Grande, Florida	\$131,981	\$43.00	\$16,008	\$9,048	\$2,088
Casper North, Wyoming	\$102,264	\$213.95	\$4,655	\$4,415	\$4,175
Corpus Christi, Texas	\$126,113	\$40.85	\$24,520	\$12,760	\$1,000
Dover, Massachusetts	\$104,977	\$40.94	\$137,953	\$72,073	\$6,193
Greenwich, Connecticut	\$150,001	\$43.11	\$140,047	\$79,447	\$18,847
Grosse Pointe Farms, Michigan	\$150,001	\$42.97	\$38,314	\$21,634	\$4,954
Hilton Head, South Carolina	\$118,422	\$34.74	\$7,252	\$2,332	\$0
Lake Wales, Florida	\$134,408	\$57.02	\$43,536	\$31,776	\$20,016
Los Alamos, New Mexico	\$81,282	\$78.69	\$372,564	\$309,084	\$245,604
McLean, Virginia	\$126,101	\$34.15	\$101,710	\$29,830	\$0
Mercer Island, Washington	\$89,540	\$40.58	\$27,413	\$14,093	\$773
Nashville-Davidson, Tennessee	\$123,582	\$37.79	\$56,786	\$24,866	\$0
Riverside, Missouri	\$150,001	\$95.03	\$11,705	\$10,145	\$8,585
Roswell-Alpha Retta, Georgia	\$150,001	\$38.78	\$49,805	\$23,285	\$0
Scarsdale, New York	\$119,342	\$40.61	\$59,604	\$30,684	\$1,764
Simi Valley, California	\$125,400	\$57.21	\$158,961	\$116,241	\$73,521
Vail, Colorado	\$102,941	\$66.08	\$37,601	\$29,441	\$21,281
Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A.					

Defining the Universal Service "Affordability" Requirement

Methodological Approach

The BCM2 with the unadjusted default values was used to compute the cost of providing basic local exchange service in each of the nation's more than 200,000 census block groups (CBGs).⁵ These cost results were compared with three different monthly revenue benchmarks — \$20, \$30 and \$40 — in order to estimate the universal service funding (USF) requirement on a state-by-state basis (i.e., to generate the "default" results of the BCM2). This is the "baseline" case — i.e., the scenario whereby *all* households in high-cost areas would be eligible for subsidization, regardless of their income level.

Because the BCM2 does not include any of the income data from the Census data base for the CBGs whose proxy costs the Model undertakes to evaluate, this data was obtained from the Census Bureau and integrated with the BCM2 data base. Median household income was selected as an appropriate metric from the income data contained in the Census CBG data base.⁶ The purpose of the analysis was to overlay CBG income and CBG cost. Three different possible income guidelines for determining high-cost eligibility were defined and analyzed:

1. Only those CBGs with incomes below the 50th percentile (i.e., below the median income level) for each state would be eligible for high-cost support.⁷
2. Only those CBGs with incomes below the 70th percentile for each state would be eligible for high-cost support (i.e., the highest 30% would be ineligible).
3. Only those CBGs with incomes below the 90th percentile for each state would be eligible for high-cost support (i.e., the highest 10% would be ineligible).

While the median household income for the US as a whole is \$30,056, there is considerable variation in income levels from state to state. For example, Connecticut has the highest median

5. Use of the BCM2 Model in no way implies endorsement of this model for determination of high-cost support funding. In fact, there is no reason to expect the pattern or overall magnitude of the results of this study to be substantially different if another cost proxy model is adopted. The BCM2 is designed in such a way as to permit the modification of certain "user-specified" values. While the BCM2 default values were not revised for this analysis, their use does not in any sense constitute agreement with these values.

6. *1990 Census of Population and Housing Summary Tape File 3A*. These data provide the most recent income statistics available from the Census Bureau. Mean and median household incomes have risen in nominal terms from 1990 to 1995, (see Current Population Reports, Series P-60, Income Statistics Branch/HHES Division, U.S. Bureau of the Census) and therefore there is a temporal mismatch between the costs examined (which are based upon estimates made in 1997) and the incomes examined (which were reported in 1990). One would expect, therefore, that the "actual" average incomes are greater than those reported in 1990. This mismatch of years does not influence the results of our analysis because we examine the income stratification rather than the income level, but it may influence any judgments that the FCC may make about the appropriate income guidelines for a high-cost fund.

7. Because the analysis relies upon a ranking of the CBGs, the 50th, 70th, and 90th percentiles do not include 50%, 70% and 90% of the households, but rather 50%, 70%, and 90% of the CBGs.

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household income (\$41,721), while Mississippi has the lowest (\$20,136). Since income levels tend to bear at least some relationship with the cost of living in a particular area (such as a state), the income distribution within each state was used to identify those CBGs falling below the three income thresholds (50th, 70th and 90th percentiles, respectively). For computational purposes, the 50%, 30%, and 10% of the CBGs, respectively, with the highest incomes, were identified to provide a reasonable approximation of comparing CBG incomes to the statewide income that corresponds with the 50th, 70th and 90th percentiles.

It should also be noted that all of the average income figures are biased downward because of the way the US Census Bureau treats incomes over \$150,000. The Census Bureau places all those with incomes above \$150,000 into the same bracket. Because of this grouping, a household with a \$1-million income is given the same statistical weighting as one with a \$150,000 income. Thus, very high incomes cannot be accurately captured in the analysis. Taking this fact into consideration would mean that many states and individual CBGs are even wealthier than they are represented to be by the Census data.⁸ This fact does not, however, affect the results because the CBGs in this income bracket would be assigned to the top percentiles, regardless of the "correct" absolute median average. However, it is relevant to an assessment of affordability and to the design of fair income guidelines.

The aggregate nationwide results for each of the three threshold percentiles (70th; 50th; 90th) and for the three revenue benchmark levels (\$20; \$30; \$40) are summarized in Tables 2-4 below.

8. Furthermore, as noted previously, the incomes are those that were reported in 1990.

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Table 2			
High-Cost Support for CBGs with Household Incomes In the Highest 30% in Each State			
Support Level	Aggregate Annual High Cost Subsidy		
	Annual USF Subsidy to All CBGs under an Income-Blind Approach	Annual Subsidy going to CBGs with Highest 30% of Household Income	Percent of Total Subsidy going to High- Income CBGs
\$20	\$14,664,182,818	\$4,468,284,015	30.5%
\$30	\$7,424,505,733	\$1,765,844,278	23.8%
\$40	\$4,258,662,622	\$780,669,907	18.3%
Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A			

Table 3			
High-Cost Support for CBGs with Household Incomes Above the Median Level in Each State			
Support Level	Aggregate Annual High Cost Subsidy		
	Annual USF Subsidy to All CBGs under an Income-Blind Approach	Annual Subsidy going to CBGs with Above-Median Household Income	Percent of Total Subsidy going to High-Income CBGs
\$20	\$14,664,182,818	\$7,900,816,877	53.9%
\$30	\$7,424,505,733	\$3,563,607,287	48.0%
\$40	\$4,258,662,622	\$1,807,377,281	42.4%
Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A			

Defining the Universal Service "Affordability" Requirement

Table 4			
High-Cost Support for CBGs with Household Incomes In the Highest 10% in Each State			
	Aggregate Annual High Cost Subsidy		
Support Level	Annual USF Subsidy to All CBGs under an Income-Blind Approach	Annual Subsidy going to CBGs with Highest 10% of Household Income	Percent of Total Subsidy going to High- Income CBGs
\$20	\$14,664,182,818	\$1,312,135,581	9.0%
\$30	\$7,424,505,733	\$412,468,003	5.6%
\$40	\$4,258,662,622	\$136,070,562	3.2%
Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A			

The USF support requirements for each state are shown in Appendix B.

Conclusion

This study demonstrates that consideration of affordability as defined by income levels can have a significant impact on the size of universal service funding for high-cost areas. For example, Table 2 above shows that at a \$20 revenue benchmark, CBGs with median income levels among the highest 30% account for 30%, or \$4.5 billion, of the high-cost funding requirement. At a revenue benchmark of \$30, CBGs in the highest 30% of income levels account for nearly 25%, or \$1.8 billion.

The significance of these results suggest that policy makers need to consider such data in designing an economically efficient universal service program that properly considers the concept of *affordability* in accordance with statutory requirements.

Appendix A

USF SUPPORT FOR SELECTED HIGH COST, HIGH INCOME LEVELS

Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A

USF Support for Selected High Cost, High Income CBGs

State	Town	Monthly Cost	# HHs	\$40 support	\$30 support	\$20 support	Income
AL	Auburn	\$60.82	6	\$1,499	\$2,219	\$2,939	\$150,001
AL	Mtn. Brook	\$39.87	165	\$0	\$19,543	\$39,343	\$127,292
AL	Pike Road	\$46.78	63	\$5,126	\$12,686	\$20,246	\$112,072
AZ	Paradise Valley	\$37.01	272	\$0	\$22,881	\$55,521	\$137,299
AZ	Phoenix (106), Paradise Valley (157)	\$51.98	263	\$37,809	\$69,369	\$100,929	\$112,349
CA	Alamo	\$62.93	147	\$40,449	\$58,089	\$75,729	\$134,883
CA	Alamo	\$87.66	383	\$219,045	\$265,005	\$310,965	\$122,478
CA	Calabasas	\$53.54	275	\$44,682	\$77,682	\$110,682	\$100,760
CA	Carmel	\$56.34	351	\$68,824	\$110,944	\$153,064	\$101,854
CA	Coto de Caza	\$43.62	363	\$15,769	\$59,329	\$102,889	\$100,765
CA	Diablo Range	\$75.57	41	\$17,500	\$22,420	\$27,340	\$150,001
CA	Lafayette (11), Moraga (105), Central Contra Costa (30)	\$57.56	146	\$30,765	\$48,285	\$65,805	\$117,064
CA	Laguna Beach (160), South Coast (548)	\$44.41	708	\$37,467	\$122,427	\$207,387	\$109,601
CA	Los Altos	\$42.75	208	\$6,864	\$31,824	\$56,784	\$123,670
CA	Los Angeles	\$45.41	170	\$11,036	\$31,436	\$51,836	\$105,511
CA	Los Gatos	\$45.06	201	\$12,205	\$36,325	\$60,445	\$107,582
CA	Los Gatos (176), San Jose (111)	\$54.60	287	\$50,282	\$84,722	\$119,162	\$100,187
CA	Monterey	\$41.35	17	\$275	\$2,315	\$4,355	\$150,001
CA	(15)	\$53.20	243	\$38,491	\$67,651	\$96,811	\$113,421
CA	Saratoga (138), San Jose (61)	\$51.58	199	\$27,653	\$51,533	\$75,413	\$111,557
CA	Simi Valley	\$57.21	356	\$73,521	\$116,241	\$158,961	\$125,400
CA	Thousand Oaks	\$76.74	130	\$57,314	\$72,914	\$88,514	\$100,472
CA	West Santa Clara	\$80.12	27	\$12,999	\$16,239	\$19,479	\$138,093
CA	West Santa Clara	\$84.43	54	\$28,791	\$35,271	\$41,751	\$113,283
CA	Woodside	\$64.93	58	\$17,351	\$24,311	\$31,271	\$106,514
CO	Cherry Hills Village	\$40.63	179	\$1,353	\$22,833	\$44,313	\$113,621
CO	South Aurora	\$45.41	290	\$18,827	\$53,627	\$88,427	\$98,331
CO	Vail	\$66.08	68	\$21,281	\$29,441	\$37,601	\$102,941
CT	Fairfield	\$45.47	238	\$15,622	\$44,182	\$72,742	\$120,607
CT	Fairfield	\$48.02	237	\$22,809	\$51,249	\$79,689	\$114,074
CT	Greenwich	\$48.90	177	\$18,904	\$40,144	\$61,384	\$150,001
CT	Greenwich	\$44.77	436	\$24,957	\$77,277	\$129,597	\$150,001
CT	Greenwich	\$43.11	505	\$18,847	\$79,447	\$140,047	\$150,001
CT	Greenwich	\$43.13	486	\$18,254	\$76,574	\$134,894	\$131,811
CT	Greenwich	\$46.15	299	\$22,066	\$57,946	\$93,826	\$113,910
CT	New Canaan	\$46.07	334	\$24,329	\$64,409	\$104,489	\$150,001
CT	New Canaan	\$56.79	144	\$29,013	\$46,293	\$63,573	\$130,978
CT	New Canaan	\$43.64	401	\$17,516	\$65,636	\$113,756	\$121,912
CT	New Canaan	\$45.33	522	\$33,387	\$96,027	\$158,667	\$121,363
CT	New Canaan	\$46.40	222	\$17,050	\$43,690	\$70,330	\$117,182
CT	New Canaan (469), Darien (10)	\$43.51	479	\$20,175	\$77,655	\$135,135	\$111,408
CT	Weston	\$59.13	107	\$24,563	\$37,403	\$50,243	\$142,866
CT	Wilton	\$46.88	311	\$25,676	\$62,996	\$100,316	\$116,095
CT	Wilton	\$43.10	307	\$11,420	\$48,260	\$85,100	\$109,343
CT	Wilton	\$44.71	578	\$32,669	\$102,029	\$171,389	\$105,432
DC	Washington DC	\$31.92	83	\$0	\$1,912	\$11,872	\$134,792
DC	Washington DC	\$29.89	128	\$0	\$0	\$15,191	\$104,498

USF Support for Selected High Cost, High Income CBGs

State	Town	Monthly Cost	# HHs	\$40 support	\$30 support	\$20 support	Income
FL	Boca Grande	\$43.00	58	\$2,088	\$9,048	\$16,008	\$131,981
FL	Indian Creek Village	\$57.07	27	\$5,531	\$8,771	\$12,011	\$150,001
FL	Jupiter Island	\$37.05	236	\$0	\$19,968	\$48,288	\$150,001
FL	Kendall-Perrine	\$41.28	81	\$1,225	\$10,945	\$20,665	\$150,001
FL	Lake Wales	\$57.02	98	\$20,018	\$31,778	\$43,538	\$134,408
FL	North Key Largo	\$48.68	256	\$26,665	\$57,385	\$88,105	\$127,518
GA	Norcross	\$47.01	51	\$4,290	\$10,410	\$16,530	\$139,375
GA	Roswell-Alpharetta	\$38.78	221	\$0	\$23,285	\$49,805	\$150,001
GA	Sandy Springs	\$42.33	173	\$4,837	\$25,597	\$48,357	\$150,001
GA	Sandy Springs	\$34.90	33	\$0	\$1,940	\$5,900	\$150,001
GA	Sandy Springs	\$38.03	145	\$0	\$13,972	\$31,372	\$132,960
GA	St. Simons	\$58.58	194	\$38,598	\$61,878	\$85,158	\$150,001
HI	Honolulu	\$33.51	1,076	\$0	\$45,321	\$174,441	\$111,017
IA	Bloomfield	\$61.07	22	\$5,562	\$8,202	\$10,842	\$102,500
IA	Sioux City	\$40.30	218	\$785	\$26,945	\$53,105	\$89,173
IL	Barrington Hills Village	\$52.61	165	\$24,968	\$44,768	\$64,568	\$114,115
IL	Barrington Hills Village (9), Inverness Village (148)	\$45.03	157	\$9,477	\$28,317	\$47,157	\$137,526
IL	Glencoe Village	\$38.00	411	\$0	\$39,456	\$88,776	\$150,001
IL	Glencoe Village	\$37.47	295	\$0	\$28,444	\$61,844	\$150,001
IL	Lake Forest	\$32.10	245	\$0	\$8,174	\$35,574	\$150,001
IL	Lake Forest	\$41.17	222	\$3,117	\$29,757	\$56,397	\$125,000
IL	Oak Brook Village	\$35.13	151	\$0	\$9,298	\$27,418	\$150,001
IN	Carmel	\$41.19	61	\$871	\$8,191	\$15,511	\$150,001
IN	Indianapolis	\$39.40	162	\$0	\$18,274	\$37,714	\$102,611
IN	Indianapolis	\$38.23	352	\$0	\$34,764	\$77,004	\$100,294
KS	Olathe	\$51.49	106	\$14,615	\$27,335	\$40,055	\$103,263
KS	Overland Park (7), Oxford (48)	\$54.53	55	\$9,590	\$16,190	\$22,790	\$130,125
KY	Glenview Hills	\$31.17	400	\$0	\$5,616	\$53,616	\$108,877
LA	East Baton Rouge	\$36.78	300	\$0	\$24,408	\$60,408	\$95,518
LA	New Orleans	\$27.86	223	\$0	\$0	\$21,033	\$104,704
LA	New Orleans	\$28.06	142	\$0	\$0	\$13,734	\$98,518
LA	Shreveport	\$29.02	209	\$0	\$0	\$22,622	\$95,804
MA	Dover	\$40.94	549	\$8,193	\$72,073	\$137,953	\$104,977
MA	Dover	\$42.35	251	\$7,078	\$37,198	\$67,318	\$103,320
MA	Harvard	\$47.63	369	\$35,617	\$82,297	\$128,977	\$100,415
MA	Lincoln	\$40.42	367	\$1,850	\$45,890	\$89,930	\$108,561
MA	Southborough	\$52.98	262	\$40,809	\$72,249	\$103,689	\$98,635
MA	Weston	\$49.84	193	\$22,789	\$45,949	\$69,109	\$125,415
MD	Clarksville	\$45.56	56	\$3,738	\$10,456	\$17,176	\$150,001
MD	Clarksville	\$36.33	193	\$0	\$14,660	\$37,820	\$115,812
MD	N. Potomac	\$38.22	276	\$0	\$27,225	\$60,345	\$150,001
MD	Potomac	\$30.16	1,867	\$0	\$3,585	\$227,625	\$150,001
MD	Potomac	\$33.77	440	\$0	\$19,908	\$72,708	\$143,588
MI	Bloomfield	\$36.97	475	\$0	\$39,729	\$98,729	\$150,001
MI	Bloomfield	\$46.53	108	\$8,463	\$21,423	\$34,383	\$150,001
MI	Grosse Pointe Shores Village	\$40.74	294	\$2,611	\$37,891	\$73,171	\$138,369
MI	Grosse Pointe Farms	\$42.97	139	\$4,954	\$21,634	\$38,314	\$150,001

USF Support for Selected High Cost, High Income CBGs

State	Town	Monthly Cost	# HHs	\$40 support	\$30 support	\$20 support	Income
MN	North Oaks	\$31.66	454	\$0	\$9,044	\$63,524	\$125,660
MN	Rochester	\$47.68	152	\$14,008	\$32,248	\$50,488	\$123,572
MN	Rochester	\$53.06	251	\$39,337	\$69,457	\$99,577	\$103,286
MO	Ladue	\$37.63	180	\$0	\$16,461	\$38,081	\$117,296
MO	Riverside	\$95.03	13	\$8,585	\$10,145	\$11,705	\$150,001
NC	Charlotte	\$37.66	79	\$0	\$7,262	\$16,742	\$134,410
NC	Charlotte	\$42.49	55	\$1,643	\$8,243	\$14,843	\$127,293
NE	McArdle	\$37.70	119	\$0	\$10,996	\$25,276	\$150,001
NJ	Kinnelon	\$63.21	204	\$56,818	\$81,298	\$105,778	\$127,885
NJ	Kinnelon	\$70.50	498	\$182,268	\$242,028	\$301,788	\$111,006
NJ	Medford	\$62.95	23	\$6,334	\$9,094	\$11,854	\$150,001
NJ	Mendham	\$54.06	172	\$29,020	\$49,660	\$70,300	\$150,001
NJ	Rumson	\$41.69	176	\$3,569	\$24,689	\$45,809	\$150,001
NM	Albuquerque	\$29.56	458	\$0	\$0	\$52,542	\$106,240
NM	Albuquerque	\$31.95	453	\$0	\$10,600	\$64,960	\$88,273
NM	Los Alamos	\$78.69	529	\$245,604	\$309,084	\$372,564	\$81,282
NM	Sandia Hts. (81), Albuquerque (25)	\$58.54	106	\$23,583	\$36,303	\$49,023	\$85,963
NV	Reno-Sparks	\$39.63	175	\$0	\$20,223	\$41,223	\$94,342
NY	Bedford	\$47.01	315	\$26,498	\$64,298	\$102,098	\$150,001
NY	Bedford	\$51.11	389	\$51,861	\$98,541	\$145,221	\$120,487
NY	Mt. Pleasant	\$57.75	193	\$41,109	\$64,269	\$87,429	\$108,732
NY	New Castle	\$47.71	187	\$15,451	\$35,491	\$55,531	\$116,167
NY	New Castle	\$58.71	68	\$14,818	\$22,738	\$30,658	\$109,563
NY	North Castle	\$54.40	694	\$119,923	\$203,203	\$266,483	\$128,855
NY	Pound Ridge	\$45.54	351	\$23,334	\$65,454	\$107,574	\$109,027
NY	Pound Ridge	\$57.17	349	\$71,908	\$113,788	\$155,668	\$106,793
NY	Rye	\$45.91	159	\$11,276	\$30,356	\$49,436	\$150,001
NY	Rye	\$40.72	187	\$1,616	\$24,056	\$46,496	\$108,725
NY	Scarsdale	\$40.61	241	\$1,764	\$30,684	\$59,604	\$119,342
OH	Bexley	\$43.87	176	\$8,173	\$29,293	\$50,413	\$150,001
OH	Hunting Valley Village	\$56.16	255	\$49,450	\$80,050	\$110,650	\$126,786
OH	Madison	\$51.26	7	\$948	\$1,786	\$2,626	\$127,308
OH	Shaker Heights	\$39.99	127	\$0	\$15,225	\$30,465	\$150,001
OH	The Village of Indian Hill	\$41.98	162	\$3,849	\$23,289	\$42,729	\$150,001
OH	The Village of Indian Hill (569), Sycamore (213)	\$38.29	802	\$0	\$79,783	\$176,023	\$148,752
OK	Edmond	\$41.26	363	\$5,489	\$49,049	\$92,609	\$99,059
OK	Tulsa	\$45.15	49	\$3,026	\$8,908	\$14,788	\$150,001
OK	Tulsa	\$34.46	287	\$0	\$15,360	\$49,800	\$97,483
OR	Portland	\$34.87	394	\$0	\$23,025	\$70,305	\$105,991
OR	Portland	\$31.35	369	\$0	\$5,978	\$50,258	\$91,295
PA	Derry	\$96.70	7	\$4,763	\$5,603	\$6,443	\$150,001
PA	Fox Chapel	\$32.64	552	\$0	\$17,487	\$83,727	\$123,339
PA	McCandless	\$38.96	170	\$0	\$18,278	\$38,678	\$137,012
PA	Pennsbury	\$35.58	92	\$0	\$6,160	\$17,200	\$101,299
PA	Wycombe	\$89.84	11	\$6,579	\$7,899	\$9,219	\$150,001

USF Support for Selected High Cost, High Income CBGs

State	Town	Monthly Cost	# HHs	\$40 support	\$30 support	\$20 support	Income
RI	Barrington	\$32.23	370	\$0	\$9,901	\$54,301	\$90,023
RI	Providence	\$35.37	220	\$0	\$14,177	\$40,577	\$97,138
RI	Providence	\$37.30	373	\$0	\$32,675	\$77,435	\$96,432
RI	Providence	\$33.10	200	\$0	\$7,440	\$31,440	\$96,432
SC	Hilton Head Island	\$34.74	41	\$0	\$2,332	\$7,252	\$118,422
SC	Pontiac	\$38.46	219	\$0	\$22,233	\$48,513	\$100,240
TN	Forest Hills (233), Oakhill (8)	\$40.75	241	\$2,169	\$31,089	\$60,009	\$106,765
TN	Germantown	\$31.07	461	\$0	\$5,919	\$61,239	\$94,998
TN	Germantown (843), Memphis (23)	\$30.29	866	\$0	\$3,014	\$106,934	\$97,785
TN	Germantown (560), Memphis (23)	\$33.77	583	\$0	\$26,375	\$96,335	\$87,389
TN	Nashville-Davidson (150), Forest Hills (116)	\$37.79	266	\$0	\$24,866	\$56,786	\$123,582
TX	Corpus Christi	\$40.85	98	\$1,000	\$12,760	\$24,520	\$126,113
TX	Dallas	\$29.09	301	\$0	\$0	\$32,833	\$150,001
TX	Houston	\$30.13	115	\$0	\$179	\$13,979	\$150,001
TX	Hunters Creek Village	\$35.93	203	\$0	\$14,445	\$38,805	\$138,210
TX	San Antonio	\$35.93	201	\$0	\$14,303	\$38,423	\$150,001
TX	San Antonio	\$38.73	224	\$0	\$23,466	\$50,346	\$130,003
TX	Tyler	\$35.02	17	\$0	\$1,024	\$3,064	\$150,001
UT	Cottonwood Hts. (267), Holladay (35)	\$37.15	302	\$0	\$25,912	\$62,152	\$99,212
VA	Great Falls	\$42.97	426	\$15,183	\$66,303	\$117,423	\$119,728
VA	McLean	\$32.09	51	\$0	\$1,279	\$7,399	\$150,001
VA	McLean	\$34.15	599	\$0	\$29,830	\$101,710	\$126,101
VA	McLean (88), Great Falls (457), Dranesville (73)	\$34.76	618	\$0	\$35,300	\$109,460	\$121,209
VA	Springfield	\$47.55	223	\$20,204	\$46,964	\$73,724	\$106,461
VA	Springfield	\$41.98	83	\$1,972	\$11,932	\$21,892	\$105,138
WA	East Seattle (225), Bellevue (37), Eastgate (9)	\$36.01	271	\$0	\$19,545	\$52,065	\$103,405
WA	Medina	\$43.52	150	\$6,336	\$24,336	\$42,336	\$94,096
WA	Mercer Island	\$40.58	111	\$773	\$14,093	\$27,413	\$89,540
WA	Seattle	\$31.57	188	\$0	\$3,542	\$26,102	\$135,080
WA	Seattle	\$32.29	302	\$0	\$8,299	\$44,539	\$110,746
WI	Bayside (35), Mequon (589)	\$33.27	624	\$0	\$24,486	\$99,366	\$108,494
WI	River Hills	\$26.18	567	\$0	\$0	\$42,049	\$110,712
WI	Whitefish Bay	\$28.36	398	\$0	\$0	\$39,927	\$99,477
WY	Casper North	\$213.95	2	\$4,175	\$4,415	\$4,655	\$102,264
WY	Douglas	\$210.74	14	\$28,684	\$30,364	\$32,044	\$125,889
WY	Gillette South	\$208.58	3	\$6,069	\$6,429	\$6,789	\$102,264
WY	Gillette South	\$205.44	12	\$23,823	\$25,263	\$26,703	\$84,511
WY	Kaycee	\$205.47	1	\$1,986	\$2,106	\$2,226	\$150,001
WY	Kaycee	\$213.43	10	\$20,812	\$22,012	\$23,212	\$102,264
Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A							

Appendix B

STATE-SPECIFIC ANALYSIS

Analysis of High Cost Support at Selected Income Levels

State	Total Support for 100% CBGs *	Total Support for Bottom 90%	% Difference (100%-90%)/100%	Total Support for Bottom 70%	% Difference (100%-70%)/100%	Total Support for Bottom 50%	% Difference (100%-50%)/100%
Alabama							
\$40 benchmark	\$108,269,744	\$105,590,367	2.5%	\$86,467,581	20.1%	\$55,705,736	48.5%
\$30 benchmark	\$196,562,895	\$189,287,545	4.7%	\$149,404,052	24.8%	\$94,459,607	52.4%
\$20 benchmark	\$348,469,876	\$318,552,809	8.6%	\$241,572,100	30.7%	\$153,954,788	55.8%
HH Income	\$23,597	\$36,097		\$26,012		\$21,379	
Alaska							
\$40 benchmark	\$27,791,223	\$25,669,293	6.9%	\$21,633,781	21.4%	\$16,628,316	40.2%
\$30 benchmark	\$36,993,635	\$35,803,695	8.2%	\$28,950,812	25.8%	\$21,492,325	44.9%
\$20 benchmark	\$57,550,956	\$51,976,327	9.7%	\$40,559,960	29.5%	\$29,093,549	49.4%
HH Income	\$41,408	\$60,000		\$47,083		\$39,583	
Arizona							
\$40 benchmark	\$86,565,140	\$82,788,550	4.4%	\$75,579,402	12.7%	\$62,376,600	27.9%
\$30 benchmark	\$127,398,841	\$119,146,275	6.5%	\$104,423,144	18.0%	\$82,583,791	35.2%
\$20 benchmark	\$243,042,550	\$222,724,431	8.4%	\$180,959,939	25.5%	\$133,814,650	44.9%
HH Income	\$27,540	\$48,750		\$33,908		\$26,126	
Arkansas							
\$40 benchmark	\$113,799,749	\$110,397,032	3.0%	\$89,488,916	21.4%	\$58,940,961	48.2%
\$30 benchmark	\$175,545,100	\$167,472,363	4.6%	\$132,497,319	24.5%	\$88,416,728	50.8%
\$20 benchmark	\$265,795,537	\$246,043,004	7.4%	\$189,193,505	28.8%	\$123,486,069	53.5%
HH Income	\$21,147	\$31,029		\$23,382		\$19,537	
California							
\$40 benchmark	\$142,568,890	\$136,801,937	4.1%	\$122,892,306	14.0%	\$96,210,665	31.1%
\$30 benchmark	\$281,163,643	\$255,705,981	9.1%	\$210,424,512	25.2%	\$160,533,631	42.9%
\$20 benchmark	\$582,584,449	\$773,961,221	12.3%	\$572,975,245	35.1%	\$391,072,920	55.7%
HH Income	\$35,798	\$61,228		\$43,750		\$34,583	
Colorado							
\$40 benchmark	\$71,726,168	\$67,890,708	5.4%	\$56,328,819	21.5%	\$38,850,630	45.6%
\$30 benchmark	\$111,565,611	\$102,633,281	8.0%	\$81,659,968	26.8%	\$54,862,360	50.8%
\$20 benchmark	\$216,517,831	\$194,598,740	10.1%	\$146,649,650	32.3%	\$95,899,015	55.7%
HH Income	\$30,140	\$50,000		\$35,809		\$27,122	
Connecticut							
\$40 benchmark	\$30,760,236	\$27,643,412	9.5%	\$18,705,975	39.2%	\$8,850,541	71.2%
\$30 benchmark	\$69,893,064	\$59,872,418	14.3%	\$38,792,185	44.5%	\$18,927,128	72.9%
\$20 benchmark	\$167,163,841	\$145,671,694	12.9%	\$100,569,127	39.8%	\$56,741,060	66.1%
HH Income	\$41,721	\$66,401		\$51,101		\$42,344	
Delaware							
\$40 benchmark	\$5,477,012	\$5,477,012	0.0%	\$4,958,275	9.5%	\$3,984,527	27.2%
\$30 benchmark	\$13,902,700	\$13,640,268	1.9%	\$12,011,939	13.6%	\$9,120,332	34.4%
\$20 benchmark	\$34,971,797	\$32,675,316	6.6%	\$26,501,788	24.2%	\$18,463,844	47.2%
HH Income	\$34,875	\$52,554		\$39,175		\$31,836	
DC							
\$40 benchmark	\$10,877	\$10,877	0.0%	\$10,877	0.0%	\$10,877	0.0%
\$30 benchmark	\$336,514	\$293,752	12.7%	\$280,330	16.7%	\$240,967	28.4%
\$20 benchmark	\$3,870,145	\$3,323,887	14.1%	\$2,939,981	24.0%	\$2,227,164	42.5%
HH Income	\$30,727	\$85,794		\$42,292		\$31,312	
Florida							
\$40 benchmark	\$96,308,431	\$92,542,043	5.9%	\$78,051,672	20.6%	\$54,026,336	45.0%
\$30 benchmark	\$236,892,332	\$217,543,509	8.9%	\$171,026,180	28.4%	\$113,839,855	52.3%
\$20 benchmark	\$691,549,942	\$616,389,900	10.9%	\$450,140,339	34.9%	\$266,882,492	58.5%
HH Income	\$27,463	\$43,818		\$31,358		\$25,476	
Georgia							
\$40 benchmark	\$118,725,962	\$117,305,812	1.2%	\$106,123,974	10.6%	\$73,946,665	37.7%
\$30 benchmark	\$225,229,959	\$217,972,887	3.2%	\$185,614,824	17.6%	\$124,100,682	44.9%
\$20 benchmark	\$442,093,403	\$410,614,143	7.1%	\$321,234,143	27.3%	\$208,386,285	52.9%
HH Income	\$29,021	\$48,487		\$32,250		\$25,476	

Analysis of High Cost Support at Selected Income Levels

State	Total Support for 100% CBGs *	Total Support for Bottom 90%	% Difference (100%-90%)/100%	Total Support for Bottom 70%	% Difference (100%-70%)/100%	Total Support for Bottom 50%	% Difference (100%-50%)/100%
Hawaii							
\$40 benchmark	\$12,303,412	\$12,044,175	2.1%	\$11,279,216	8.3%	\$8,838,137	27.4%
\$30 benchmark	\$22,693,811	\$21,874,565	4.5%	\$19,141,719	15.7%	\$14,150,848	37.6%
\$20 benchmark	\$51,291,616	\$46,317,775	9.7%	\$36,303,998	29.2%	\$25,564,663	50.2%
HH Income	\$38,829	\$60,782		\$45,764		\$38,082	
Idaho							
\$40 benchmark	\$49,047,890	\$47,092,159	4.0%	\$37,759,597	23.0%	\$24,793,610	49.5%
\$30 benchmark	\$67,793,723	\$64,023,742	5.6%	\$50,832,427	25.0%	\$32,684,469	51.8%
\$20 benchmark	\$101,014,177	\$92,642,161	8.3%	\$72,034,928	28.7%	\$46,434,617	54.0%
HH Income	\$25,257	\$37,398		\$28,125		\$23,958	
Illinois							
\$40 benchmark	\$122,421,435	\$120,752,361	1.4%	\$108,863,882	11.1%	\$80,601,001	34.2%
\$30 benchmark	\$228,954,578	\$218,107,954	4.7%	\$184,877,998	19.3%	\$132,668,659	42.1%
\$20 benchmark	\$528,026,002	\$481,598,695	8.8%	\$373,940,439	29.2%	\$255,952,129	51.5%
HH Income	\$32,252	\$53,587		\$38,281		\$30,637	
Indiana							
\$40 benchmark	\$94,566,121	\$88,287,710	6.9%	\$60,392,180	36.3%	\$33,228,419	65.0%
\$30 benchmark	\$185,030,110	\$167,684,194	9.4%	\$113,477,704	38.7%	\$63,075,651	65.9%
\$20 benchmark	\$368,748,293	\$324,560,367	12.0%	\$224,537,993	39.1%	\$134,375,945	63.6%
HH Income	\$28,797	\$41,930		\$32,292		\$27,361	
Iowa							
\$40 benchmark	\$97,944,053	\$94,474,730	3.5%	\$75,531,382	22.9%	\$48,267,813	49.7%
\$30 benchmark	\$155,771,649	\$148,030,881	5.0%	\$117,272,897	24.7%	\$77,806,742	50.1%
\$20 benchmark	\$253,959,119	\$235,101,678	7.4%	\$183,269,987	27.8%	\$122,342,739	51.8%
HH Income	\$26,229	\$37,714		\$29,219		\$25,323	
Kansas							
\$40 benchmark	\$93,776,223	\$90,772,029	3.2%	\$70,828,381	24.7%	\$48,092,739	48.7%
\$30 benchmark	\$138,528,850	\$128,877,550	5.1%	\$98,567,986	27.3%	\$67,084,787	50.5%
\$20 benchmark	\$216,661,281	\$198,241,586	8.5%	\$147,434,214	32.0%	\$98,838,408	54.4%
HH Income	\$27,291	\$41,250		\$30,000		\$24,464	
Kentucky							
\$40 benchmark	\$109,247,643	\$106,811,840	2.4%	\$92,220,015	15.6%	\$69,535,849	36.4%
\$30 benchmark	\$192,062,787	\$184,056,167	4.2%	\$154,852,791	19.5%	\$114,143,418	40.6%
\$20 benchmark	\$323,873,103	\$300,196,917	7.3%	\$242,804,703	25.0%	\$173,890,367	46.3%
HH Income	\$22,534	\$36,460		\$26,389		\$20,833	
Louisiana							
\$40 benchmark	\$98,405,080	\$84,690,032	2.0%	\$72,727,842	15.8%	\$48,076,718	48.7%
\$30 benchmark	\$159,803,823	\$152,243,100	4.7%	\$124,499,182	22.1%	\$78,523,856	50.9%
\$20 benchmark	\$302,844,210	\$277,842,910	8.4%	\$215,351,240	28.9%	\$136,545,867	54.9%
HH Income	\$21,949	\$37,448		\$25,921		\$20,096	
Maine							
\$40 benchmark	\$83,273,866	\$77,194,773	7.3%	\$61,719,517	25.9%	\$44,868,022	46.1%
\$30 benchmark	\$119,192,822	\$109,259,536	8.3%	\$85,728,367	28.1%	\$61,217,844	48.6%
\$20 benchmark	\$186,243,367	\$151,443,273	8.9%	\$117,017,157	29.6%	\$82,116,465	50.6%
HH Income	\$27,854	\$39,792		\$31,469		\$27,328	
Maryland							
\$40 benchmark	\$23,251,531	\$22,690,473	1.7%	\$20,170,042	13.3%	\$15,472,344	33.5%
\$30 benchmark	\$57,229,901	\$54,237,214	5.2%	\$43,186,080	24.5%	\$29,818,286	47.9%
\$20 benchmark	\$169,320,456	\$153,080,258	9.6%	\$112,731,589	33.4%	\$70,965,284	58.1%
HH Income	\$39,386	\$63,998		\$46,707		\$37,011	
Massachusetts							
\$40 benchmark	\$34,183,623	\$30,856,083	9.7%	\$22,452,411	34.3%	\$11,836,661	65.4%
\$30 benchmark	\$66,074,470	\$73,962,539	14.1%	\$49,844,675	42.1%	\$25,230,814	70.7%
\$20 benchmark	\$232,967,722	\$201,169,303	13.7%	\$137,191,577	41.1%	\$76,622,603	67.1%
HH Income	\$36,952	\$58,260		\$44,432		\$36,875	
Michigan							
\$40 benchmark	\$133,039,135	\$130,056,277	2.2%	\$109,899,910	17.4%	\$81,984,025	38.4%
\$30 benchmark	\$273,337,536	\$258,946,146	5.3%	\$206,520,741	24.4%	\$144,040,965	47.3%
\$20 benchmark	\$568,650,242	\$536,640,856	8.5%	\$410,807,372	30.0%	\$274,800,265	53.2%
HH Income	\$31,020	\$50,138		\$36,607		\$29,265	

Analysis of High Cost Support at Selected Income Levels

State	Total Support for 100% CBGs *	Total Support for Bottom 90%	% Difference (100%-90%)/100%	Total Support for Bottom 70%	% Difference (100%-70%)/100%	Total Support for Bottom 50%	% Difference (100%-50%)/100%
Minnesota							
\$40 benchmark	\$125,519,748	\$124,008,188	1.2%	\$114,743,408	8.8%	\$87,825,843	30.0%
\$30 benchmark	\$192,788,716	\$187,848,158	2.7%	\$188,474,489	13.6%	\$124,241,450	35.6%
\$20 benchmark	\$329,231,859	\$308,291,331	6.4%	\$253,399,823	23.0%	\$182,516,928	44.6%
HH Income	\$30,909	\$48,750		\$35,282		\$28,038	
Mississippi							
\$40 benchmark	\$92,713,783	\$89,987,899	2.9%	\$75,324,097	18.8%	\$51,932,598	44.0%
\$30 benchmark	\$157,912,848	\$149,851,058	5.2%	\$121,885,589	22.8%	\$82,448,821	47.8%
\$20 benchmark	\$253,971,695	\$234,493,387	7.7%	\$188,111,878	26.7%	\$126,135,225	50.3%
HH Income	\$20,138	\$33,125		\$23,184		\$18,920	
Missouri							
\$40 benchmark	\$175,081,457	\$172,514,535	1.5%	\$151,478,875	13.5%	\$108,583,900	38.0%
\$30 benchmark	\$258,888,881	\$249,315,074	2.9%	\$212,088,172	17.4%	\$149,705,784	41.7%
\$20 benchmark	\$423,818,132	\$391,240,470	7.7%	\$312,841,083	26.2%	\$218,088,718	49.0%
HH Income	\$28,382	\$41,027		\$29,228		\$22,879	
Montana							
\$40 benchmark	\$55,338,185	\$50,958,921	7.9%	\$39,833,923	28.0%	\$27,335,944	50.6%
\$30 benchmark	\$72,177,350	\$68,189,948	8.3%	\$50,888,887	29.5%	\$34,222,707	52.8%
\$20 benchmark	\$98,429,580	\$90,183,247	9.3%	\$68,333,776	31.3%	\$45,188,978	54.8%
HH Income	\$22,988	\$35,000		\$28,750		\$22,135	
Nebraska							
\$40 benchmark	\$71,445,801	\$70,248,030	1.7%	\$57,910,010	18.9%	\$41,198,819	42.3%
\$30 benchmark	\$99,355,252	\$96,408,082	3.0%	\$78,488,385	21.0%	\$55,727,021	43.9%
\$20 benchmark	\$149,255,438	\$139,449,430	6.6%	\$110,340,278	26.1%	\$77,078,289	48.4%
HH Income	\$28,018	\$39,769		\$28,438		\$23,750	
Nevada							
\$40 benchmark	\$34,198,875	\$32,222,047	5.8%	\$28,893,125	21.4%	\$19,538,804	42.9%
\$30 benchmark	\$47,574,874	\$44,157,121	7.2%	\$35,088,858	26.2%	\$24,837,007	48.2%
\$20 benchmark	\$83,727,899	\$77,872,378	7.2%	\$59,151,907	29.4%	\$39,822,845	52.4%
HH Income	\$31,011	\$50,498		\$38,859		\$31,023	
New Hampshire							
\$40 benchmark	\$38,727,493	\$36,156,715	6.6%	\$28,218,719	27.1%	\$18,838,050	57.0%
\$30 benchmark	\$65,434,007	\$59,411,365	9.2%	\$44,744,228	31.8%	\$28,860,215	55.9%
\$20 benchmark	\$108,138,535	\$94,723,041	10.8%	\$70,122,850	33.9%	\$44,863,394	57.7%
HH Income	\$36,329	\$52,177		\$40,417		\$34,375	
New Jersey							
\$40 benchmark	\$117,382,888	\$118,223,341	6.8%	\$10,978,443	38.8%	\$5,777,982	66.7%
\$30 benchmark	\$60,829,712	\$54,873,352	10.1%	\$38,842,883	39.8%	\$20,081,778	67.0%
\$20 benchmark	\$233,915,933	\$208,902,508	11.5%	\$143,244,508	38.8%	\$88,513,583	63.0%
HH Income	\$40,927	\$68,043		\$50,305		\$40,383	
New Mexico							
\$40 benchmark	\$85,874,198	\$83,073,987	4.0%	\$53,681,471	18.3%	\$41,588,981	38.7%
\$30 benchmark	\$88,829,008	\$84,080,997	5.3%	\$69,902,719	21.3%	\$52,731,102	40.8%
\$20 benchmark	\$135,988,308	\$125,241,825	7.9%	\$100,139,007	26.4%	\$71,898,392	47.1%
HH Income	\$24,087	\$39,898		\$27,321		\$21,483	
New York							
\$40 benchmark	\$188,623,784	\$183,102,380	2.1%	\$151,838,872	8.8%	\$115,217,851	39.9%
\$30 benchmark	\$307,187,887	\$292,289,189	4.9%	\$255,891,016	16.8%	\$181,425,584	40.9%
\$20 benchmark	\$859,810,412	\$801,888,244	8.8%	\$474,148,384	28.1%	\$318,300,649	52.0%
HH Income	\$32,985	\$58,827		\$42,000		\$32,292	
North Carolina							
\$40 benchmark	\$142,022,304	\$139,812,182	1.6%	\$117,842,042	17.0%	\$84,514,709	40.5%
\$30 benchmark	\$282,980,936	\$271,445,358	4.1%	\$216,274,808	23.8%	\$148,799,552	47.4%
\$20 benchmark	\$528,885,378	\$488,467,050	7.8%	\$372,759,555	29.6%	\$251,830,083	52.5%
HH Income	\$28,847	\$40,257		\$29,850		\$25,082	

Analysis of High Cost Support at Selected Income Levels

State	Total Support for 100% CBGs *	Total Support for Bottom 80%	% Difference (100%-80%)/100%	Total Support for Bottom 70%	% Difference (100%-70%)/100%	Total Support for Bottom 60%	% Difference (100%-60%)/100%
North Dakota							
\$40 benchmark	\$57,124,436	\$52,749,783	7.7%	\$40,702,308	28.7%	\$29,267,941	48.8%
\$30 benchmark	\$70,790,328	\$64,832,043	8.4%	\$50,405,243	28.8%	\$36,173,375	48.9%
\$20 benchmark	\$82,077,432	\$63,042,027	9.8%	\$64,817,956	29.8%	\$45,852,234	50.2%
HH Income	\$23,213	\$33,534		\$25,625		\$21,591	
Ohio							
\$40 benchmark	\$126,393,296	\$124,464,191	3.1%	\$90,993,485	29.1%	\$47,255,869	63.2%
\$30 benchmark	\$272,185,011	\$254,910,124	6.3%	\$182,806,970	32.8%	\$97,643,280	64.1%
\$20 benchmark	\$614,504,586	\$551,939,009	10.2%	\$393,651,819	35.9%	\$227,060,678	63.0%
HH Income	\$28,708	\$43,854		\$33,113		\$27,188	
Oklahoma							
\$40 benchmark	\$100,984,247	\$97,175,241	3.8%	\$77,387,369	23.4%	\$52,178,869	48.3%
\$30 benchmark	\$158,856,469	\$150,239,913	5.4%	\$117,408,471	26.1%	\$78,970,826	50.3%
\$20 benchmark	\$267,259,957	\$244,439,341	8.5%	\$184,563,748	30.9%	\$123,368,880	53.8%
HH Income	\$23,577	\$37,917		\$26,818		\$21,333	
Oregon							
\$40 benchmark	\$77,502,634	\$74,468,504	3.9%	\$60,656,911	21.7%	\$42,022,674	45.8%
\$30 benchmark	\$119,637,078	\$112,071,803	6.3%	\$87,342,513	27.0%	\$59,088,440	50.6%
\$20 benchmark	\$216,925,875	\$196,290,456	9.5%	\$146,591,534	32.4%	\$97,833,205	55.0%
HH Income	\$27,250	\$40,369		\$30,663		\$25,500	
Pennsylvania							
\$40 benchmark	\$163,593,183	\$161,735,506	1.1%	\$140,441,627	14.2%	\$99,367,855	39.3%
\$30 benchmark	\$301,994,936	\$291,026,075	3.6%	\$236,166,621	21.6%	\$158,661,674	47.5%
\$20 benchmark	\$612,775,392	\$557,932,046	8.9%	\$421,766,962	31.2%	\$275,782,389	55.0%
HH Income	\$29,069	\$44,556		\$32,857		\$26,906	
Rhode Island							
\$40 benchmark	\$6,773,314	\$5,709,064	15.7%	\$2,704,908	60.1%	\$408,418	94.0%
\$30 benchmark	\$15,697,779	\$12,913,667	17.7%	\$6,365,144	59.5%	\$1,789,650	88.6%
\$20 benchmark	\$43,928,435	\$37,439,372	14.8%	\$22,651,037	48.4%	\$11,111,673	74.7%
HH Income	\$32,181	\$46,837		\$38,047		\$32,344	
S. Carolina							
\$40 benchmark	\$81,374,752	\$79,859,400	1.9%	\$69,773,460	14.3%	\$49,463,270	39.2%
\$30 benchmark	\$152,970,263	\$146,702,315	4.1%	\$121,373,808	20.7%	\$82,873,632	45.8%
\$20 benchmark	\$279,168,065	\$258,309,808	7.1%	\$203,200,964	27.2%	\$136,637,576	51.4%
HH Income	\$26,256	\$40,921		\$30,066		\$24,659	
S. Dakota							
\$40 benchmark	\$52,449,770	\$49,080,400	6.4%	\$38,474,562	26.6%	\$27,083,580	48.3%
\$30 benchmark	\$69,560,205	\$64,696,506	7.0%	\$50,386,200	27.6%	\$35,540,457	48.9%
\$20 benchmark	\$83,631,437	\$85,567,574	8.8%	\$65,437,376	30.1%	\$46,206,562	50.7%
HH Income	\$22,503	\$32,009		\$24,406		\$21,028	
Tennessee							
\$40 benchmark	\$113,374,821	\$110,026,017	3.0%	\$93,690,417	17.4%	\$63,225,035	44.2%
\$30 benchmark	\$214,180,251	\$202,523,389	5.4%	\$163,984,815	23.4%	\$108,537,054	49.3%
\$20 benchmark	\$361,293,772	\$358,799,780	8.3%	\$277,007,527	29.2%	\$181,929,528	53.5%
HH Income	\$24,807	\$39,661		\$28,125		\$22,708	
Texas							
\$40 benchmark	\$272,533,671	\$269,453,788	1.1%	\$235,680,716	13.5%	\$157,627,714	42.2%
\$30 benchmark	\$484,134,553	\$447,639,704	3.5%	\$372,965,280	19.6%	\$245,034,783	47.2%
\$20 benchmark	\$965,508,384	\$891,069,787	7.7%	\$691,340,558	28.4%	\$450,580,466	53.3%
HH Income	\$27,016	\$48,214		\$31,827		\$24,333	
Utah							
\$40 benchmark	\$32,625,938	\$31,423,462	4.3%	\$26,968,791	17.8%	\$21,222,410	35.3%
\$30 benchmark	\$47,672,399	\$44,711,790	6.2%	\$36,641,951	23.1%	\$27,476,772	42.4%
\$20 benchmark	\$90,499,294	\$82,189,321	9.2%	\$63,636,313	29.7%	\$44,327,961	51.0%
HH Income	\$29,470	\$44,312		\$34,412		\$26,150	

Analysis of High Cost Support at Selected Income Levels

State	Total Support for 100% CBGs *	Total Support for Bottom 90%	% Difference (100%-90%)/100%	Total Support for Bottom 70%	% Difference (100%-70%)/100%	Total Support for Bottom 50%	% Difference (100%-50%)/100%
Vermont							
\$40 benchmark	\$35,858,893	\$32,685,777	8.6%	\$24,752,762	31.0%	\$16,816,312	53.1%
\$30 benchmark	\$51,951,872	\$46,883,995	9.8%	\$34,940,866	32.7%	\$23,580,297	54.6%
\$20 benchmark	\$72,293,239	\$64,524,458	10.7%	\$47,692,438	34.0%	\$32,286,176	55.3%
HH Income	\$29,792	\$40,625		\$32,436		\$28,687	
Virginia							
\$40 benchmark	\$99,818,917	\$96,929,941	0.7%	\$88,177,839	11.5%	\$66,910,433	32.6%
\$30 benchmark	\$168,054,501	\$163,946,364	2.2%	\$157,874,668	16.0%	\$115,073,395	38.8%
\$20 benchmark	\$377,184,292	\$352,557,139	6.5%	\$280,475,018	25.6%	\$194,133,913	48.5%
HH Income	\$33,328	\$57,273		\$37,467		\$28,250	
Washington							
\$40 benchmark	\$76,625,819	\$75,376,447	1.6%	\$67,485,025	11.9%	\$52,213,427	31.9%
\$30 benchmark	\$131,124,036	\$125,492,230	4.3%	\$106,923,569	18.5%	\$77,505,072	40.9%
\$20 benchmark	\$279,458,573	\$255,546,319	8.6%	\$201,634,397	27.8%	\$137,178,965	50.9%
HH Income	\$31,183	\$47,574		\$36,719		\$30,515	
W. Virginia							
\$40 benchmark	\$96,501,878	\$93,718,019	2.9%	\$80,700,189	16.4%	\$60,928,788	36.9%
\$30 benchmark	\$145,860,348	\$139,234,319	4.5%	\$116,636,074	20.0%	\$86,007,793	41.0%
\$20 benchmark	\$214,204,712	\$200,069,520	6.6%	\$163,084,767	23.9%	\$117,926,734	44.9%
HH Income	\$20,795	\$31,354		\$23,750		\$19,907	
Wisconsin							
\$40 benchmark	\$107,453,939	\$104,539,244	2.7%	\$89,461,090	16.7%	\$67,391,924	37.3%
\$30 benchmark	\$187,460,245	\$176,406,539	5.9%	\$142,686,775	23.9%	\$102,579,273	45.3%
\$20 benchmark	\$343,209,336	\$312,636,320	8.6%	\$240,646,022	29.6%	\$166,029,408	51.6%
HH Income	\$29,442	\$43,375		\$33,250		\$28,113	
Wyoming							
\$40 benchmark	\$27,183,736	\$24,692,380	9.2%	\$17,248,566	36.5%	\$11,553,327	57.5%
\$30 benchmark	\$35,529,656	\$32,099,703	9.7%	\$21,908,201	38.3%	\$14,497,327	59.2%
\$20 benchmark	\$50,296,544	\$45,096,984	10.3%	\$30,377,360	39.6%	\$19,642,193	60.9%
HH Income	\$27,096	\$41,442		\$30,441		\$24,635	
Entire US:							
\$40 benchmark	\$4,268,662,622	\$4,122,692,060	3.2%	\$3,477,992,716	18.3%	\$2,461,286,341	42.4%
\$30 benchmark	\$7,424,606,733	\$7,012,037,730	5.6%	\$6,658,661,466	23.8%	\$3,860,898,446	48.0%
\$20 benchmark	\$14,664,182,818	\$13,362,047,237	8.9%	\$10,196,896,803	30.6%	\$6,763,366,941	53.9%
*Note: Household income at the 100% level is the median income for that state.							
At the 90%, 70%, and 50% levels, the household income is the highest income in that bracket.							
Sources: BCM2, 1990 Census of Population and Housing Summary Tape File 3A							